

Title (en)
ALLOCATION OF UPLINK RESOURCES IN A MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) COMMUNICATION SYSTEM

Title (de)
RESSOURCENZUTEILUNG AUF DEM RÜCKWÄRTSKANAL IN EINEM MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) KOMMUNIKATIONSSYSTEM

Title (fr)
Affectation de ressources en liaison ascendante dans un système de communication à entrées et sorties multiples (MIMO)

Publication
EP 2239990 B1 20160831 (EN)

Application
EP 10170537 A 20020514

Priority
• EP 02731791 A 20020514
• US 85934601 A 20010516

Abstract (en)
[origin: WO02093782A1] Techniques to schedule uplink data transmission for a number of terminals (106) in a wireless communication system. In one method, a number of sets of terminals (100) are formed for possible data transmission, with each set including a unique combination of terminals and corresponds to a hypothesis to be evaluated. The performance of each hypothesis is evaluated (e.g., based on channel response estimates for each terminal) and one of the evaluated hypotheses is selected based on the performance. The terminals in the selected hypothesis are scheduled for data transmission. A successive cancellation receiver processing scheme may be used to process the signals transmitted by the scheduled terminals. In this case, one or more orderings of the terminals in each set may be formed, with each terminal ordering corresponding to a sub-hypothesis to be evaluated. The performance of each sub-hypothesis is then evaluated and one of the sub-hypotheses is selected.

IPC 8 full level
H04B 1/14 (2006.01); **H04B 7/04** (2006.01); **H04B 7/06** (2006.01); **H04J 99/00** (2009.01); **H04L 12/56** (2006.01); **H04W 16/00** (2009.01); **H04W 72/12** (2009.01); **H04B 7/08** (2006.01); **H04W 72/04** (2009.01)

CPC (source: EP KR US)
H04B 7/0413 (2013.01 - KR); **H04B 7/0417** (2013.01 - EP US); **H04B 7/0626** (2013.01 - EP KR US); **H04B 17/336** (2015.01 - KR); **H04W 72/121** (2013.01 - EP US); **H04W 72/1268** (2013.01 - KR); **H04W 72/51** (2023.01 - KR); **H04B 7/0697** (2013.01 - EP US); **H04B 7/0891** (2013.01 - EP US); **H04W 72/12** (2013.01 - EP US)

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CN104685799A; CN112333754A; US9654323B2; US9722842B2; US9820209B1; US10257765B2; US10349332B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02093782 A1 20021121; AU 2002303737 B2 20071101; BR 0209641 A 20061114; BR PI0209641 B1 20170509; CA 2446930 A1 20021121; CA 2446930 C 20130409; CA 2736610 A1 20021121; CA 2736610 C 20140617; CN 1319292 C 20070530; CN 1529950 A 20040915; EP 1393466 A1 20040303; EP 1393466 B1 20160831; EP 2239990 A1 20101013; EP 2239990 B1 20160831; HK 1066655 A1 20050324; IL 158896 A0 20040512; JP 2005514801 A 20050519; JP 4455816 B2 20100421; KR 100916167 B1 20090908; KR 20030096406 A 20031224; MX PA03010519 A 20040701; NO 20035071 D0 20031114; RU 2003136164 A 20050527; RU 2288538 C2 20061127; TW 569561 B 20040101; UA 75405 C2 20060417; US 2002177447 A1 20021128; US 2006105761 A1 20060518; US 7047016 B2 20060516; US 7184743 B2 20070227

DOCDB simple family (application)
US 0215300 W 20020514; AU 2002303737 A 20020514; BR 0209641 A 20020514; CA 2446930 A 20020514; CA 2736610 A 20020514; CN 02814193 A 20020514; EP 02731791 A 20020514; EP 10170537 A 20020514; HK 04109559 A 20041202; IL 15889602 A 20020514; JP 2002590538 A 20020514; KR 20037014916 A 20020514; MX PA03010519 A 20020514; NO 20035071 A 20031114; RU 2003136164 A 20020514; TW 91110227 A 20020516; UA 20031211615 A 20020514; US 30179005 A 20051212; US 85934601 A 20010516